

Customer Number: 000959

Attorney's  
Docket  
Number MNI-134CP2

Declaration, Petition and Power of Attorney for Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**32142, 21481, 25964, 21686, NOVEL DEHYDROGENASE MOLECULES AND USES THEREFOR**

the specification of which

(check one)

       is attached hereto.

X was filed on April 18, 2001 as

Application Serial No. 09/838,561

and was amended on \_\_\_\_\_  
(if applicable)

I do not know and do not believe that the subject matter of this application was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date of this application, or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date of this application on an application filed more than twelve months (six months if this application is for a design) before the filing of this application; and I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

# CLAIM OF BENEFIT OF EARLIER FOREIGN APPLICATION(S)

I hereby claim priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application(s) for patent or inventor's certificate filed by me on the same subject matter having a filing date before that of the application(s) from which priority is claimed.

Check one:

☒ no such applications have been filed.

☐ such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
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CLAIM FOR BENEFIT OF U.S. PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

60/192,002  
(Application Serial No.)

March 24, 2000  
(Filing Date)

\_\_\_\_\_  
(Application Serial No.)

\_\_\_\_\_  
(Filing Date)

# CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

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<u>09/634,955</u> (Application Serial No.)	<u>August 8, 2000</u> (Filing Date)	<u>                    </u> (Status) (patented,pending,aband.)
<u>09/816,760</u> (Application Serial No.)	<u>March 23, 2001</u> (Filing Date)	<u>                    </u> (Status) (patented,pending,aband.)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

James E. Cockfield	Reg. No. 19,162	Peter C. Lauro	Reg. No. 32,360
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Ralph A. Loren	Reg. No. 29,325	David J. Ridders	Reg. No. 43,882
Giulio A. DeConti, Jr.	Reg. No. 31,503	Maria C. Laccotripe	Limited Recognition
Ann Lamport Hammitte	Reg. No. 34,858		Under 37 C.F.R. § 10.9(b)
Elizabeth A. Hanley	Reg. No. 33,505	Debra J. Milasincic	Reg. No. 46,931
Amy E. Mandragouras	Reg. No. 36,207	David R. Burns	Reg. No. 46,590
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Jeremiah Lynch	Reg. No. 17,425	Cynthia L. Kanik	Reg. No. 37,320
Kevin J. Canning	Reg. No. 35,470		
Jeanne M. DiGiorgio	Reg. No. 41,710		
Megan E. Williams	Reg. No. 43,270		
Nicholas P. Triano III	Reg. No. 36,397		

all of: LAHIVE & COCKFIELD, LLP, 28 State Street, Boston, MA 02109

and to: Jean M. Silveri	Reg. No. 39,030	Mark F. Boshar	Reg. No. 35,456
Theodore Allen	Reg. No. 41,578	Scott A. Brown	Reg. No. 32,724
Jill E. Uhl	Reg. No. 43,213	George C. Jen	Reg. No. 39,239
Susan M. Perkins	Reg. No. 36,405		

of: Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, MA 02139

Send Correspondence to Amy E. Mandragouras, Esq. at Customer Number: 000959 whose address is:

Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109

Direct Telephone Calls to: (name and telephone number)

Amy E. Mandragouras, Esq., (617) 227-7400

Wherefore I petition that letters patent be granted to me for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe my name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor Rachel Meyers	
Inventor's signature X <i>Rachel Meyers</i>	Date X 10/5/01
Residence 115 Devonshire Road Newton, MA 02468	
Citizenship U.S.A.	
Post Office Address (if different)	

Full name of second inventor William James Cook	
Inventor's signature	Date
Residence 22 Reynolds Avenue Natick, MA 01760	
Citizenship U.S.A.	
Post Office Address (if different)	

Full name of third inventor, if any Mark Williamson	
Inventor's signature	Date
Residence 15 Stonecrest Drive Saugus, MA 01906	
Citizenship U.S.A.	
Post Office Address (if different)	

Full name of fourth inventor, if any Laura A. Rudolph-Owen	
Inventor's signature	Date
Residence 186 Arborway, #1, Jamaica Plain, MA 02130	
Citizenship U.S.A.	
Post Office Address (if different)	

Full name of sole or first inventor Ruth Gimeno	
Inventor's signature	Date
Residence 250 Commonwealth Avenue, Apt. No. 23, Boston, Massachusetts 02116	
Citizenship U.S.A.	
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(Application Serial No.)

March 24, 2000

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Inventor's signature	Date
Residence 115 Devonshire Road Newton, MA 02468	
Citizenship U.S.A.	
Post Office Address (if different)	

Full name of second inventor William James Cook	
Inventor's signature X <i>William James Cook</i>	Date X 10/9/01
Residence 22 Reynolds Avenue Natick, MA 01760 <i>245 Messer Hill Rd. New London, NH 03257</i>	
Citizenship U.S.A.	
Post Office Address (if different)	

Full name of third inventor, if any Mark Williamson	
Inventor's signature	Date
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Full name of fourth inventor, if any Laura A. Rudolph-Owen	
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March 24, 2000

(Filing Date)

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60/192,002

(Application Serial No.)

(Filing Date)

EXAMINE FOREIGN APPLICATION(S) IF ANY FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing	Priority Claimed
			Yes No
			Yes No
			Yes No
			Yes No

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POWER OF ATTORNEY: I, the undersigned, hereby authorize the following person:  
and I hereby authorize the undersigned to execute and file this application in the Patent and  
Trademark Office.

<b>Full name of first inventor</b>	<b>Date</b>
Rachel Meyers	10.30.00
<b>Inventor's signature</b>	<b>Reg. No.</b>
Rachel Meyers	45,882
<b>Residence</b>	<b>Reg. No.</b>
115 Devonshire Road	46,971
Newton, MA 02468	45,190
<b>Citizenship</b>	<b>Reg. No.</b>
U.S.A.	47,450
<b>Post Office Address (if different)</b>	
35,470	
11,710	
270	
36,397	

<b>Full name of second inventor</b>	<b>Date</b>
William James Cook	10.31.00
<b>Inventor's signature</b>	<b>Reg. No.</b>
William James Cook	35,170
<b>Residence</b>	<b>Reg. No.</b>
22 Reynolds Avenue	37,733
Natick, MA 01760	29,239
<b>Citizenship</b>	
U.S.A.	
<b>Post Office Address (if different)</b>	<b>at Customer Number:</b>
Mandragoras, Reg.	000959

<b>Full name of third inventor, if any</b>	<b>Date</b>
Mark Williamson	10.4.01
<b>Inventor's signature</b>	<b>Reg. No.</b>
Mark Williamson	
<b>Residence</b>	<b>Reg. No.</b>
15 Stonecrest Drive	
Saugus, MA 01906	
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Inventor's signature	Date
Residence 250 Commonwealth Avenue, Apt. No. 23, Boston, Massachusetts 02116	
Citizenship U.S.A. MA-02116 New Bedford, MA 01907	
Post Office Address (if different) U.S.A.	
Post Office Address (if different)	

Customer Number: 000959

Attorney's

Docket

Number MNI-134CP2

Declaration, Petition and Power of Attorney for Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**32142, 21481, 25964, 21686, NOVEL DEHYDROGENASE MOLECULES AND USES THEREFOR**  
the specification of which

(check one)

is attached hereto.

☒ was filed on April 18, 2001 as

Application Serial No. 09/838,561

and was amended on \_\_\_\_\_  
(if applicable)

I do not know and do not believe that the subject matter of this application was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date of this application, or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date of this application on an application filed more than twelve months (six months if this application is for a design) before the filing of this application; and I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

# CLAIM OF BENEFIT OF EARLIER FOREIGN APPLICATION(S)

I hereby claim priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application(s) for patent or inventor's certificate filed by me on the same subject matter having a filing date before that of the application(s) from which priority is claimed.

Check one: ☐ Partial ☐ Full

☒ no such applications have been filed.

☐ such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
X was filed on April 18, 2001			<input type="checkbox"/> Yes <input type="checkbox"/> No

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION


This application is a continuation-in-part of U.S. Patent No. 6,000,000, filed on 10/1/99, which is hereby incorporated by reference herein. The present invention relates to a method for determining the priority of a patent application. The method includes the steps of: (a) receiving a patent application; (b) determining the filing date of the patent application; (c) determining the filing date of the earliest foreign application; (d) comparing the filing date of the patent application with the filing date of the earliest foreign application; and (e) determining the priority of the patent application based on the comparison.

I declare under oath that I am the inventor of the invention described in this application, and I declare that I am not aware of any other person who has contributed to the invention described in this application.

# CLAIM FOR BENEFIT OF U.S. PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

60/192,002

(Application Serial No.)

March 24, 2000

(Filing Date)

(Application Serial No.)

(Filing Date)

		Yes	No
		Yes	No

ALL FOREIGN APPLICATIONS, IF ANY, MUST BE FILED WITHIN 12 MONTHS OF THE DATE OF THE U.S. PROVISIONAL APPLICATION.

# CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any earlier United States application(s) or PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the earlier application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date(s) of the earlier application(s) and the national or PCT international filing date of this application. As to subject matter of this application which is common to my earlier application(s), if any, described below, I do not know and do not believe that the same was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date(s) of said earlier application(s), or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date(s) of said earlier application(s) on an application filed more than twelve months (six months if this application is for a design) before the filing of said earlier application(s); and I acknowledge that no application for patent or inventor's certificate on said subject matter has been filed by me or my representatives or assigns in any country foreign to the United States except those identified herein.

09/634,955  
(Application Serial No.)

August 8, 2000  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented,pending,aband.)

09/816,760  
(Application Serial No.)

March 23, 2001  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented,pending,aband.)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

James E. Cockfield Reg. No. 19,162  
 Thomas V. Smurzynski Reg. No. 24,798  
 Ralph A. Loren Reg. No. 29,325  
 Giulio A. DeConti, Jr. Reg. No. 31,503  
 Ann Lamport Hammitte Reg. No. 34,858  
 Elizabeth A. Hanley Reg. No. 33,505  
 Amy E. Mandragouras Reg. No. 36,207  
 Anthony A. Laurentano Reg. No. 38,220  
 Jane E. Remillard Reg. No. 38,872  
 Jeremiah Lynch Reg. No. 17,425  
 Kevin J. Canning Reg. No. 35,470  
 Jeanne M. DiGiorgio Reg. No. 41,710  
 Megan E. Williams Reg. No. 43,270  
 Nicholas P. Triano III Reg. No. 36,397

Peter C. Lauro Reg. No. 32,360  
 DeAnn F. Smith Reg. No. 36,683  
 David J. Ridders Reg. No. 43,882  
 Maria C. Laccotripe Limited Recognition Under 37 C.F.R. § 10.9(b)  
 Debra J. Milasincic Reg. No. 46,931  
 David R. Burns Reg. No. 46,590  
 Sean D. Detweiler Reg. No. 42,482  
 Peter S. Stecher Reg. No. 47,259  
 Cynthia L. Kanik Reg. No. 37,320

all of: **LAHIVE & COCKFIELD, LLP, 28 State Street, Boston, MA 02109**

and to: Jean M. Silveri Reg. No. 39,030  
 Theodore Allen Reg. No. 41,578  
 Jill E. Uhl Reg. No. 43,213  
 Susan M. Perkins Reg. No. 36,405  
 Mark F. Boshar Reg. No. 35,456  
 Scott A. Brown Reg. No. 32,724  
 George C. Jen Reg. No. 39,239

of: **Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, MA 02139**

(Application Serial No.) (Filing Date) (Status)  
 Send Correspondence to **Amy E. Mandragouras, Esq.** at **Customer Number: 000959** whose address is:

**Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109**

Direct Telephone Calls to: (name and telephone number)

**Amy E. Mandragouras, Esq., (617) 227-7400**

Wherefore I petition that letters patent be granted to me for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe my name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: I, the undersigned, do hereby appoint the following attorneys in law to represent me and to conduct all business in the name and on behalf of the undersigned.

<b>Full name of first inventor</b> Rachel Meyers	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Inventor's signature</b> Rachel Meyers	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Residence</b> 115 Devonshire Road Newton, MA 02468	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Citizenship</b> U.S.A.	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Post Office Address (if different)</b> 115 Devonshire Road Newton, MA 02468	Reg. No. 33,553	Date	Reg. No. 33,553

<b>Full name of second inventor</b> William James Cook	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Inventor's signature</b> William James Cook	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Residence</b> 22 Reynolds Avenue Natick, MA 01760	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Citizenship</b> U.S.A.	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Post Office Address (if different)</b> 22 Reynolds Avenue Natick, MA 01760	Reg. No. 33,553	Date	Reg. No. 33,553

<b>Full name of third inventor, if any</b> Mark Williamson	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Inventor's signature</b> Mark Williamson	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Residence</b> 15 Stonecrest Drive Saugus, MA 01906	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Citizenship</b> U.S.A.	Reg. No. 33,553	Date	Reg. No. 33,553
<b>Post Office Address (if different)</b> 15 Stonecrest Drive Saugus, MA 01906	Reg. No. 33,553	Date	Reg. No. 33,553

I hereby declare that the foregoing statements are true and correct to the best of my knowledge and belief, and that I am not aware of any material misstatements or omissions in the foregoing statements, and that I am not aware of any material misstatements or omissions in the foregoing statements, and that I am not aware of any material misstatements or omissions in the foregoing statements.

Full name of fourth inventor, if any Laura A. Rudolph-Owen	
Inventor's signature <i>X Laura Rudolph-Owen</i>	Date <i>X 10/3/01</i>
Residence 1186 Arborway, #1, Jamaica Plain, MA 02130	
Citizenship U.S.A. MA 02130	
Post Office Address (if different) Post Office Address (if different)	

Full name of sole or first inventor Ruth Gimeno - second inventor	
Inventor's signature <i>Ruth Gimeno</i>	Date <i>10/3/01</i>
Residence 250 Commonwealth Avenue, Apt. No. 23, Boston, Massachusetts 02116	
Citizenship U.S.A. MA 02116	
Post Office Address (if different) U.S.A.	
Post Office Address (if different)	

Full name of third inventor, if any April A. H. [illegible]	
Residence 15 [illegible] [illegible]	
Citizenship U.S.A.	
Post Office Address (if different) Post Office Address (if different)	

Customer Number: 000959

Attorney's  
Docket  
Number MNI-134CP2

Inventor

## Declaration, Petition and Power of Attorney for Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,  
Post Office Address (if different)

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**32142, 21481, 25964, 21686, NOVEL DEHYDROGENASE MOLECULES AND USES THEREFOR**  
the specification of which

(check one)

250 Commonwealth Avenue, Apt. No. 23, Boston, Massachusetts 02116

C is attached hereto.

U.S.A.

X was filed on April 18, 2001 as

Application Serial No. 09/838,561

and was amended on \_\_\_\_\_  
(if applicable)

I do not know and do not believe that the subject matter of this application was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date of this application, or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date of this application on an application filed more than twelve months (six months if this application is for a design) before the filing of this application; and I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

CLAIM OF BENEFIT OF EARLIER FOREIGN APPLICATION(S)

I hereby claim priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below, and have also identified below any foreign application(s) for patent or inventor's certificate filed by me on the same subject matter having a filing date before that of the application(s) from which priority is claimed.

Check one: ☐ Application, ☐ Renewal, ☐ Transfer

As X no such applications have been filed.

Any such applications have been filed as follows: as stated in the report to my committee:

1. EARLIEST FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS  
 original, and (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
X was filed on April 18, 2001		as	<input type="checkbox"/> Yes <input type="checkbox"/> No

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS  
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

and was amended on \_\_\_\_\_

[illegible]

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

# CLAIM FOR BENEFIT OF U.S. PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.  
 matter has been filed in the United States Code, 119 of any United States provisional application(s) listed below.

60/192,002

(Application Serial No.)

March 24, 2000

(Filing Date)

☒ No foreign applications have been filed

☐ Foreign applications have been filed as follows:

(Application Serial No.)

(Filing Date)

ALL FOREIGN APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month/year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION


# CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any earlier United States application(s) or PCT international application(s) designating the United States listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the earlier application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112; I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date(s) of the earlier application(s) and the national or PCT international filing date of this application. As to subject matter of this application which is common to my earlier application(s), if any, described below, I do not know and do not believe that the same was known or used by others in the United States or patented or described in a printed publication in any country before my invention thereof, or patented or described in a printed publication in any country or in public use or on sale in the United States more than one year prior to the date(s) of said earlier application(s), or first patented or caused to be patented or made the subject of an inventor's certificate by me or my legal representatives or assigns in a country foreign to the United States prior to the date(s) of said earlier application(s) on an application filed more than twelve months (six months if this application is for a design) before the filing of said earlier application(s); and I acknowledge that no application for patent or inventor's certificate on said subject matter has been filed by me or my representatives or assigns in any country foreign to the United States except those identified herein.

09/634,955  
(Application Serial No.)

August 8, 2000  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented,pending,aband.)

09/816,760  
(Application Serial No.)

March 23, 2001  
(Filing Date)

\_\_\_\_\_  
(Status)  
(patented,pending,aband.)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

James E. Cockfield	Reg. No. 19,162	Peter C. Lauro	Reg. No. 32,360
Thomas V. Smurzynski	Reg. No. 24,798	DeAnn F. Smith	Reg. No. 36,683
Ralph A. Loren	Reg. No. 29,325	David J. Ridders	Reg. No. 43,882
Giulio A. DeConti, Jr.	Reg. No. 31,503	Maria C. Laccotripe	Limited Recognition
Ann Lampion Hammitte	Reg. No. 34,858		Under 37 C.F.R. § 10.9(b)
Elizabeth A. Hanley	Reg. No. 33,505	Debra J. Milasincic	Reg. No. 46,931
Amy E. Mandragouras	Reg. No. 36,207	David R. Burns	Reg. No. 46,590
Anthony A. Laurentano	Reg. No. 38,220	Sean D. Detweiler	Reg. No. 42,482
Jane E. Remillard	Reg. No. 38,872	Peter S. Stecher	Reg. No. 47,259
Jeremiah Lynch	Reg. No. 17,425	Cynthia L. Kanik	Reg. No. 37,320
Kevin J. Canning	Reg. No. 35,470		
Jeanne M. DiGiorgio	Reg. No. 41,710		
Megan E. Williams	Reg. No. 43,270		
Nicholas P. Triano III	Reg. No. 36,397		

all of: **LAHIVE & COCKFIELD, LLP, 28 State Street, Boston, MA 02109**

and to: Jean M. Silveri	Reg. No. 39,030	Mark F. Boshar	Reg. No. 35,456
Theodore Allen	Reg. No. 41,578	Scott A. Brown	Reg. No. 32,724
Jill E. Uhl	Reg. No. 43,213	George C. Jen	Reg. No. 39,239
Susan M. Perkins	Reg. No. 36,405		

of: **Millennium Pharmaceuticals, Inc., 75 Sidney Street, Cambridge, MA 02139**

(Application Serial No.) (Filing Date) (Status)  
Send Correspondence to Amy E. Mandragouras, Esq. at **Customer Number: 000959** whose  
address is: (patented/pending/abandoned)

Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109

(Application Serial No.) (Filing Date) (Status)  
Direct Telephone Calls to: (name and telephone number) (patented/pending/abandoned)

Amy E. Mandragouras, Esq., (617) 227-7400

Wherefore I petition that letters patent be granted to me for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe my name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor	Rachel Meyers	Reg. No. 46,882
Inventor's signature	Rachel Meyers	Date
Residence	115 Devonshire Road Newton, MA 02468	
Citizenship	U.S.A.	
Post Office Address (if different)		

Full name of second inventor William James Cook			
Inventor's signature Theodore A. Uhl	Reg. No. 32,010	Made in Boston	Date Reg. No. 35,456
Residence 22 Reynolds Avenue Natick, MA 01760	Reg. No. 41,478	George C. Ten	Reg. No. 37,724
Citizenship U.S.A.	Reg. No. 43,213	George C. Ten	Reg. No. 39,239
Post Office Address (if different) Mandragoras, Esq.			
Patent Office Address (if different) Mandragoras, Esq.			
Customer Number: 000959			

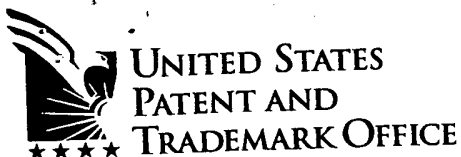
Full name of third inventor, if any	and telephone number
Mark Williamson	
Inventor's signature	Date
Residence	
15 Stonecrest Drive	
Saugus, MA 01906	
Citizenship	
U.S.A.	
Post Office Address (if different)	

- 6 -

Full name of fourth inventor, if any	
Laura A. Rudolph-Owen	
Inventor's signature	Date
Residence	
186 Arborway, #1, Jamaica Plain, MA 02130	
Citizenship	
U.S.A.	
Post Office Address (if different)	
Post Office Address (if different)	

Full name of sole or first inventor	
Ruth Gimeno	
Inventor's signature	Date
X <i>Ruth Gimeno</i>	X 10/3/01
Residence	
65 BEVERLY RD, WELLESLEY, MA 02481	
250 Commonwealth Avenue, Apt. No. 23, Boston, Massachusetts 02116	
Citizenship	
U.S.A. - GERMANY	
Post Office Address (if different)	
U.S.A.	
Post Office Address (if different)	

Full name of third inventor, if any	
Mark W. ...	
Inventor's signature	
Residence	
13 Street ...	
Post Office Address (if different)	
Post Office Address (if different)	



MAY 31, 2002

PTAS

Commissioner for Trademarks  
Arlington, VA 22202-3513  
www.uspto.gov

LAHIVE & COCKFIELD, LLP  
AMY E. MANDRAGOURAS, ESQ.  
28 STATE STREET  
BOSTON, M.A. 02109



\*102046442A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 03/25/2002

REEL/FRAME: 012748/0645  
NUMBER OF PAGES: 16

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
MEYERS, RACHEL

DOC DATE: 10/05/2001

ASSIGNOR:  
COOK, WILLIAM JAMES

DOC DATE: 01/04/2002

ASSIGNOR:  
WILLIAMSON, MARK

DOC DATE: 01/04/2002

ASSIGNOR:  
RUDOLPH-OWEN, LAURA A.

DOC DATE: 10/03/2001

ASSIGNOR:  
GIMENO, RUTH

DOC DATE: 10/03/2001

ASSIGNEE:  
MILLENNIUM PHARMACEUTICALS, INC.  
75 SIDNEY STREET  
CAMBRIDGE, MASSACHUSETTS 02139

012748/0645 PAGE 2

SERIAL NUMBER: 09838561  
PATENT NUMBER:

FILING DATE: 04/18/2001  
ISSUE DATE:

MARCUS KIRK, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

FORM PTO-1595  
(Rev. 6-93)  
OMB No. 0651-0011 (exp. 4/94)

04-08-2002



SHEET

U.S. DEPARTMENT OF  
COMMERCE  
Patent and Trademark Office

Tab settings ⇄⇄⇄▽

To the Honorable Commissioner

102046442

Attached original documents or copy thereof.

▽ MNI-134CP2

1. Name of conveying party(ies):

- 1) Rachel Meyers
- 2) William James Cook
- 3) Mark Williamson
- 4) Laura A. Rudolph-Owen
- 5) Ruth Gimeno

3-25-02

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Other \_\_\_\_\_

Execution Dates: 1) October 5, 2001; 2) January 4, 2002; 3) October 4, 2001; 4) October 3, 2001; and 5) October 3, 2001

2. Name and address of receiving party(ies)

Name: Millennium Pharmaceuticals, Inc.

Internal Address: \_\_\_\_\_

Street Address: 75 Sidney Street

City: Cambridge State: Massachusetts  
ZIP: 02139

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)  
09/838,561

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Amy E. Mandragouras, Esq.

Internal Address: Lahive & Cockfield, LLP

Street Address: 28 State Street

City: Boston State: MA ZIP: 02109

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41).....\$ \$40.00

☒ Enclosed

☐ Authorized to be charged to deposit account

8. Deposit account number:

12-0080 (deficiency only)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Maria C. Laccotripe, Ph.D.  
Limited Recognition Under CFR §10.9(b)  
Name of Person Signing

*Maria C. Laccotripe*  
Signature

March 15, 2002  
Date

Total number of pages including cover sheet, attachments, and document:

16

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents and Trademarks  
Box Assignment  
Washington, D.C. 20231

04/2002 INVELLER 00000085 09838561

FD-581

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FINANCE SECTION

ASSIGNMENT

We, Rachel Meyers of Newton, MA, William James Cook of Natick, MA, Mark Williamson of Saugus, MA, Laura A. Rudolph-Owen of Jamaica Plain, MA, and Ruth Gimeno of Boston, MA, in consideration of One Dollar and other valuable consideration paid to us by

Millennium Pharmaceuticals, Inc.

a corporation of Delaware, having its principal place of business at 75 Sidney Street, Cambridge, MA, 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

Millennium Pharmaceuticals, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

32142, 21481, 25964, 21686, NOVEL DEHYDROGENASE MOLECULES AND USES  
THEREFOR

described in an application

☐ executed by us of even date herewith and about to be filed

☒ Serial No. 09/838,561, filed on April 18, 2001

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 5 day of Oct, 2001.

By: X Rachel Meyers  
Rachel Meyers

State of Massachusetts )  
 )ss  
County of Middlesex )

Then personally appeared the above named Rachel Meyers and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 5<sup>th</sup> day of October, 2001.

Ann Sherry  
Notary Public (ANN SHERRY)  
My Commission Expires 4/19/07

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
William James Cook

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named William James Cook and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Mark Williamson

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named Mark Williamson and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Laura A. Rudolph-Owen

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named Laura A. Rudolph-Owen and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Ruth Gimeno

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named Ruth Gimeno and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

ASSIGNMENT

M. L. WILLIAMSON HPI 2000-07901R1CP

We, Rachel Meyers of Newton, MA, William James Cook of Natick, MA, Mark Williamson of Saugus, MA, Laura A. Rudolph-Owen of Jamaica Plain, MA, and Ruth Gimeno of Boston, MA, in consideration of One Dollar and other valuable consideration paid to us by

Millennium Pharmaceuticals, Inc.

a corporation of Delaware, having its principal place of business at 75 Sidney Street, Cambridge, MA, 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

Millennium Pharmaceuticals, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

32142, 21481, 25964, 21686, NOVEL DEHYDROGENASE MOLECULES AND USES THEREFOR

described in an application

☐ executed by us of even date herewith and about to be filed

☒ Serial No. 09/838,561, filed on April 18, 2001

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Rachel Meyers

State of Massachusetts       )  
                                          )ss  
County of                        )

Then personally appeared the above named Rachel Meyers and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
William James Cook

State of Massachusetts )  
 )ss  
County of \_\_\_\_\_ )

Then personally appeared the above named William James Cook and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this 4<sup>th</sup> day of October, 2001.

By: X Mark Williamson  
Mark Williamson

State of Massachusetts )  
 )ss  
County of Middlesex )

Then personally appeared the above named Mark Williamson and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 4<sup>th</sup> day of October, 2001.

Ann Sherry  
Notary Public (ANN SHERRY)

My commission expires: 4/19/07

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Laura A. Rudolph-Owen

State of Massachusetts       )  
                                          )ss  
County of                        )

Then personally appeared the above named Laura A. Rudolph-Owen and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Ruth Gimeno

State of Massachusetts       )  
                                          )ss  
County of                        )

Then personally appeared the above named Ruth Gimeno and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

ASSIGNMENT

L. RUDOLPH-OWEN  
PI 2000-079 PIRICP2

We, Rachel Meyers of Newton, MA, William James Cook of Natick, MA, Mark Williamson of Saugus, MA, Laura A. Rudolph-Owen of Jamaica Plain, MA, and Ruth Gimeno of Boston, MA, in consideration of One Dollar and other valuable consideration paid to us by

Millennium Pharmaceuticals, Inc.

a corporation of Delaware, having its principal place of business at 75 Sidney Street, Cambridge, MA, 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

Millennium Pharmaceuticals, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

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THEREFOR

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☒ Serial No. 09/838,561, filed on April 18, 2001

in the United States Patent and Trademark Office, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense and charges, hereafter to execute all applications, amended specifications, deed or other instrument, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Rachel Meyers

State of Massachusetts )  
                                          )ss  
County of )

Then personally appeared the above named Rachel Meyers and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
William James Cook

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named William James Cook and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Mark Williamson

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named Mark Williamson and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this 3<sup>rd</sup> day of October, 2001.

By: X *Laura Rudolph Owen*  
Laura A. Rudolph-Owen

State of Massachusetts )  
 )ss  
County of Middlesex )

Then personally appeared the above named Laura A. Rudolph-Owen and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 3<sup>rd</sup> day of October, 2001.

*Ann Sherry*  
Notary Public (ANN SHERRY)

My commission expires: 4/19/07

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Ruth Gimeno

State of Massachusetts )  
 )ss  
County of \_\_\_\_\_ )

Then personally appeared the above named Ruth Gimeno and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

ASSIGNMENT

R.G.H. 20 MP12000-079 PIRICP2

We, Rachel Meyers of Newton, MA, William James Cook of Natick, MA, Mark Williamson of Saugus, MA, Laura A. Rudolph-Owen of Jamaica Plain, MA, and Ruth Gimeno of ~~Boston~~ <sup>Wellesley</sup> MA, in consideration of One Dollar and other valuable consideration paid to us by <sup>25/03/01</sup>

Millennium Pharmaceuticals, Inc.

a corporation of Delaware, having its principal place of business at 75 Sidney Street, Cambridge, MA, 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

Millennium Pharmaceuticals, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

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And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Rachel Meyers

State of Massachusetts     )  
                                          )ss  
County of                        )

Then personally appeared the above named Rachel Meyers and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
William James Cook

State of Massachusetts     )  
                                      )ss  
County of                     )

Then personally appeared the above named William James Cook and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Mark Williamson

State of Massachusetts     )  
                                      )ss  
County of                     )

Then personally appeared the above named Mark Williamson and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Laura A. Rudolph-Owen

State of Massachusetts )  
 )ss  
County of )

Then personally appeared the above named Laura A. Rudolph-Owen and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this 3<sup>rd</sup> day of October, 2001.

By: x Ruth Gimeno  
Ruth Gimeno

State of Massachusetts )  
 )ss  
County of Middlesex )

Then personally appeared the above named Ruth Gimeno and acknowledged the foregoing instrument to be his/her free act and deed, before me, this 3<sup>rd</sup> day of October, 2001.

Ann Sherry  
Notary Public (ANN SHERRY)

My commission expires: 4/19/07

ASSIGNMENT

W.J. Cook  
HPI 2000-079 PIRCP2

Handover WJC

We, Rachel Meyers of Newton, MA, William James Cook of ~~New London~~ NH, Mark Williamson of Saugus, MA, Laura A. Rudolph-Owen of Jamaica Plain, MA, and Ruth Gimeno of Boston, MA, in consideration of One Dollar and other valuable consideration paid to us by

Millennium Pharmaceuticals, Inc.

a corporation of Delaware, having its principal place of business at 75 Sidney Street, Cambridge, MA, 02139, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said

Millennium Pharmaceuticals, Inc.

its successors and assigns, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in

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And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Rachel Meyers

State of Massachusetts )  
                                          )ss  
County of )

Then personally appeared the above named Rachel Meyers and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this 4 day of January, <sup>2002</sup>~~2001~~.

By: x William James Cook  
William James Cook

Massachusetts  
State of ~~New Hampshire~~ )  
County of Middlesex ) s.s.

Then personally appeared the above named William James Cook and acknowledged the foregoing <sup>AS</sup>  
instrument to be his/her free act and deed, before me, this 4<sup>th</sup> day of January, ~~2001~~ <sup>2002</sup>.

Ann Sherry  
Notary Public (ANN SHERRY)

My commission expires: 4/19/07

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Mark Williamson

State of Massachusetts )  
County of \_\_\_\_\_ ) ss

Then personally appeared the above named Mark Williamson and acknowledged the foregoing  
instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Laura A. Rudolph-Owen

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named Laura A. Rudolph-Owen and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

By: \_\_\_\_\_  
Ruth Gimeno

State of Massachusetts     )  
                                          )ss  
County of                     )

Then personally appeared the above named Ruth Gimeno and acknowledged the foregoing instrument to be his/her free act and deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 2001.

\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_